

IN THE CLAIMS:

Claims 9-18, 20-23, and 42-45 have been amended herein. Claims 46-50 have been added. Please note that all claims currently pending and under consideration in the referenced application are shown below. Please enter these claims as amended. This listing of claims will replace all prior versions and listings of claims in the application.

Listing of Claims:

1-8. (canceled)

9. (Currently Amended) A device for establishing electrical contact with a lead element extending from an IC device, comprising:
a one-piece substrate bounded by a first surface and an opposing, second surface and having at least one conductive trace, wherein ~~said~~the first surface is configured for mounting a plurality of IC devices thereto;
a spring contact including a generally uncoiled base portion and a contact portion, ~~said~~the contact portion comprising a resiliently compressible coil spring comprising a plurality of coils configured to bias against and electrically contact a lead element of an IC device of ~~said~~the plurality of IC devices, and ~~said~~the base portion extending generally ~~longitudinal~~longitudinally from ~~said~~the contact portion and transversely to the coils of the coil spring;
and
an aperture including a seat portion opening onto ~~said~~the first surface of ~~said~~the one-piece substrate and a retaining portion having a substantially uniform interior size and a first end connected to an opposing end of ~~said~~the seat portion and a second end ~~of a smaller lateral extent than the seat portion~~ extending ~~a depth~~ at least partially into ~~said~~the one-piece substrate ~~therefrom~~, wherein the substantially uniform interior size of the retaining portion is smaller than an interior size of the seat portion at the first surface of the one-

piece substrate, ~~said~~the seat portion of ~~said~~the aperture sized and configured to at least partially contain ~~said~~the contact portion of ~~said~~the spring contact and support the coils of the coil spring during compression thereof, and ~~said~~the retaining portion of ~~said~~the aperture configured to receive and electrically connect ~~said~~the base portion of ~~said~~the spring contact to ~~said~~the at least one conductive trace.

10. (Currently Amended) The device of claim 9, wherein ~~said~~the second end of ~~said~~the retaining portion does not extend entirely through ~~said~~the one-piece substrate to ~~said~~the opposing, second surface.

11. (Currently Amended) The device of claim 9, further comprising a layer of conductive material disposed on at least a portion of an interior wall of ~~said~~the aperture, ~~said~~the layer of conductive material electrically connecting ~~said~~the base portion of ~~said~~the spring contact to ~~said~~the at least one conductive trace.

12. (Currently Amended) The device of claim 11, wherein ~~said~~the at least one conductive trace is formed on ~~said~~the first surface of ~~said~~the one-piece substrate.

13. (Currently Amended) The device of claim 11, wherein ~~said~~the at least one conductive trace is formed on an intermediate plane within ~~said~~the one-piece substrate.

14. (Currently Amended) The device of claim 11, wherein ~~said~~the retaining portion of ~~said~~the aperture extends through ~~said~~the one-piece substrate and opens onto ~~said~~the opposing, second surface of ~~said~~the one-piece substrate and ~~said~~the at least one conductive trace is formed on ~~said~~the opposing, second surface of ~~said~~the one-piece substrate.

15. (Currently Amended) The device of claim 9, further comprising a volume of conductive filler material disposed in and filling ~~at least a partial depth~~ at least a portion of a longitudinal extent of ~~said~~the aperture within which the base portion extends and electrically

contacting ~~said~~the base portion of ~~said~~the spring contact.

16. (Currently Amended) The device of claim 15, wherein ~~said~~the conductive filler material is electrically connected to ~~said~~the at least one conductive trace of ~~said~~the one-piece substrate.

17. (Currently Amended) The device of claim 16, wherein ~~said~~the at least one conductive trace is formed on an intermediate plane within ~~said~~the one-piece substrate.

18. (Currently Amended) The device of claim 16, wherein ~~said~~the retaining portion of ~~said~~the aperture extends through ~~said~~the one-piece substrate and opens onto ~~said~~the opposing, second surface of ~~said~~the one-piece substrate and ~~said~~the at least one conductive trace is formed on ~~said~~the opposing, second surface of ~~said~~the one-piece substrate.

19. (canceled)

20. (Currently Amended) The device of claim 9, wherein ~~said~~the second end of ~~said~~the retaining portion opens onto ~~said~~the opposing, second surface of ~~said~~the one-piece substrate.

21. (Currently Amended) The device of claim 9, wherein ~~said~~the seat portion comprises a generally hemispherical recess formed in ~~said~~the first surface of ~~said~~the one-piece substrate, a generally conical recess formed in ~~said~~the first surface of ~~said~~the one-piece substrate, or a generally cylindrical recess formed in ~~said~~the first surface of ~~said~~the one-piece substrate.

22. (Currently Amended) The device of claim 9, wherein ~~said~~the seat portion is further configured to at least partially align ~~said~~the lead element of ~~said~~the IC device relative to ~~said~~the spring contact.

23. (Currently Amended) The device of claim 9, wherein ~~said~~the contact portion of ~~said~~the spring contact comprises a resiliently compressible coil spring having at least two spring coils ~~for contacting portions thereof and wherein each of the at least two spring coils is~~ configured to bias against and electrically contact ~~said~~the lead element of ~~said~~the IC device.

24-41. (canceled)

42. (withdrawn) The device of claim 9, wherein ~~said~~the resiliently compressible coil spring of ~~said~~the contact portion further comprises at least one point for penetrating an outer surface of ~~said~~the lead element of ~~said~~the IC device.

43. (withdrawn) The device of claim 9, wherein ~~said~~the resiliently compressible coil spring of ~~said~~the contact portion further comprises a contact element selected from the group consisting of a sharp edge formed by a cross-section of ~~said~~the resiliently compressible coil spring, a blade extending longitudinally along a surface of ~~said~~the resiliently compressible coil spring, a blade extending circumferentially around a surface of ~~said~~the resiliently compressible coil spring or a barb protruding from a surface of ~~said~~the resiliently compressible coil spring.

44. (withdrawn) The device of claim 9, further comprising a clamping element configured to secure ~~said~~the IC device to ~~said~~the first substantially planar surface of ~~said~~the substantially planar substrate.

45. (withdrawn) The device of claim 44, wherein ~~said~~the clamping element comprises a stab-in-place clip.

46. (New) The device of claim 9, wherein the contact portion of the spring contact exhibits at least one of a substantially cylindrical shape, a conical shape, and a hemispherical shape.

47. (New) The device of claim 9, wherein the contact portion of the spring contact includes an apex positioned for contacting the lead element of the IC device.

48. (New) The device of claim 9, wherein the base portion of the spring contact is sized to extend, at most, partially into the retaining portion of the aperture.

49. (New) The device of claim 15, wherein another longitudinal extent of the aperture is free from the conductive filler material.

50. (New) The device of claim 23, wherein an interior size of the aperture exceeds, along the longitudinal extent thereof, a cross-sectional size of a material forming the spring contact.